



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,359	06/07/2001	Luigi Pace	CM2381	9161
27752 7590 01/25/2008 THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION - WEST BLDG. WINTON HILL BUSINESS CENTER - BOX 412 6250 CENTER HILL AVENUE CINCINNATI, OH 45224			EXAMINER KHAN, AMINA S	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 01/25/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/876,359	Applicant(s) PACE ET AL.	
	Examiner Amina Khan	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/1/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11,13,15,16 and 19-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11,13,15,16 and 19-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 1, 2007 has been entered.

2. Claims 1-11,13,15,16 and 19-24 are pending. Claims 1,13,15,16,19 and 20 have been amended. Claims 21-24 are new. Claims 12,14,17 and 18 have been cancelled.

3. All prior rejections are withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5,8-10,13,15,16 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shindo et al. (US 5,853,430).

6. Shindo et al. teach detergent compositions in which the detergent solution generates heat of neutralization from citric acid and carbonate or a heat of hydration by hydrating carbonate (column 42, lines 5-15). Shindo further teach the compositions comprise at least about 1-40% by weight of an anionic surfactant such as alkyl glycerol sulfonates, sulfosuccinates (column 6, lines 40-60; column 7, lines 30-35). Shindo et al. further teach treating carpets (column 3, lines 1-10).

Shindo does not teach all the instantly claimed embodiments in a single example and is silent to the amount of heat generated.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the instantly claimed components from the teachings of Shindo because Shindo teach these components as beneficial in providing soiled substrates such as carpets with effective cleaning. Regarding the heat generation, one of ordinary skill would expect similar compositions to produce similar thermal increases.

Regarding the limitation "in any order" this reads on applying simultaneously. Nothing unobvious is seen in combining components prior to applying to the substrate for the benefit of expediting the process. One of ordinary skill in the art would expect simultaneous application and separate application to provide similar results because both would apply a heated composition to a similar substrate.

7. Claims 1-11,13,15,16 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wei et al. (US 6,245,729) in view of Shindo et al. (US 5,853,430).

8. Wei et al. teach heat generating compositions comprising a first solid (column 6, lines 50-60) component containing a peracid precursor, a peroxygen source, a moisture barrier such as monoethanol amide of stearic acids, which meets the claimed limitation of fatty acid C₆-C₂₄ alkanolamide surfactant, and a chemical heater, such as zeolites, pyrophosphoric acid or inorganic salts, and a second component containing water (abstract; column 11, lines 30-45 and 57-67; column 9, lines 60-67; column 10, lines 1-12). Wei et al. further teach the chemical heater when contacted with the water generates enough heat to produce a 5°C to 25°C increase in local temperature and increases the rate of peracid formation (column 9, lines 29-67; column 10, lines 1-12). Wei et al. further teach that the chemical heater can be triggered by hydrolysis, hydration or acid-base neutralization, such as the combination of sodium hydroxide and citrus acid (column 10, lines 1-11). Wei et al. further teach that the composition may be used as a carpet sanitizer generated on the surface of the substrate (column 14, lines 3-7).

Wei et al. do not teach the instantly claimed and percentage of anionic surfactants.

Shindo is relied upon as described in paragraph 6.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods of Wei by incorporating the surfactants of Shindo in mixtures at the instantly claimed percentages because Shindo teaches these compounds as conventional deterative components in heat generating carpet cleaning compositions. Nothing unobvious is seen in using mixtures of different anionic

surfactants as they are all taught as functionally equivalent by Shindo and optimizing to the instantly claimed quantities for maximal cleaning benefits.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff*, 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

9. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wei et al. (US 6,245,729) in view of Shindo et al. (US 5,853,430) and further in view of Scialla et al. (US 5,905,065).

Wei et al. and Shindo et al. are relied upon as set forth in paragraphs 8 and 6.

Wei et al. and Shindo do not teach betaine zwitterionic surfactants.

Art Unit: 1796

Scialla et al. teach carpet cleaning compositions comprising amine oxide surfactants (column 4, lines 25-35), anionic, cationic, zwitterionic, nonionic surfactants, and mixtures thereof, specifically, fatty acid alkanolamides, sulphosuccinates, glucose amides, and betaines (column 11, lines 15-67). Scialla et al. further teach that the compositions can be applied in powder form and diluted with water at the time of application to carpets (column 12, lines 55-60; column 3, lines 60-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Wei et al. and Shindo by substituting the surfactants taught by Scialla for the surfactants taught by Wei and Shindo because Scialla et al. teach the functional equivalence of the anionic, zwitterionic and nonionic surfactants for the benefits of producing compositions with improved stain removal properties. Substituting art recognized equivalents only requires routine skill in the art.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amina Khan whose telephone number is (571) 272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AK

AK

January 9, 2008

Lorna M. Douyon

LORNA M. DOUYON
PRIMARY EXAMINER